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GEOLOGY.—*Note on unreported Oligocene in Citrus County, Florida.*[1]

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Mossom[2] in 1925 assigned to the Ocala limestone (upper Eocene) the entire thickness of about 115 feet exposed in the vertical face of the Crystal River Rock Company's quarry located five miles southeast of Crystal River, Citrus County, Florida. In 1929, Cooke and Mossom[3] also assigned to the Ocala limestone the entire thickness of the exposure, then about 121 feet. In 1937, the locality was visited by the writer and C. W. Mumm, and a collection of fossils was obtained from all parts of the opening (U. S. Geol. Survey station 14141). When studied later, this collection was found to contain a mixture of Oligocene and Eocene fossils. The quarry was visited in 1938 by the writer and F. S. MacNeil, and at this time a collection was obtained from the upper part of the face (station 14336). This collection contains definitely Oligocene fossils and supplies evidence for assignment of the upper part of the exposure to the Suwannee limestone.

Much of the wall of the quarry consists of limestone, but an undulating and somewhat indurated clayey band, one foot in thickness, runs irregularly across the upper part of the face, its position estimated to be in places 70 feet above the floor of the quarry. It clearly cuts across the horizontal beds of the underlying rock. The approximate lower boundary of this clay band is indicated by the dotted line on the accompanying photograph (Fig. 1), though on account of the nearly vertical exposure and concealment in places by rubble the exact position of the contact is not everywhere clear. This band is interpreted as the unconformable contact between the Ocala limestone (upper Eocene) and the overlying Suwannee limestone (Oligocene). The thickness of Oligocene strata may be as much as 30 feet.

[1] Published with the permission of the Director, Geological Survey, United States Department of the Interior. Received Nov. 14, 1938.

[2] MOSSOM, STUART. *A preliminary report on the limestones and marls of Florida.* Florida State Geol. Survey 16th Ann. Rept. pp. 124, 125. 1925.

[3] COOKE, C. W., and MOSSOM, STUART. *Geology of Florida.* Florida Geol. Survey 20th Ann. Rept. p. 56. 1929.

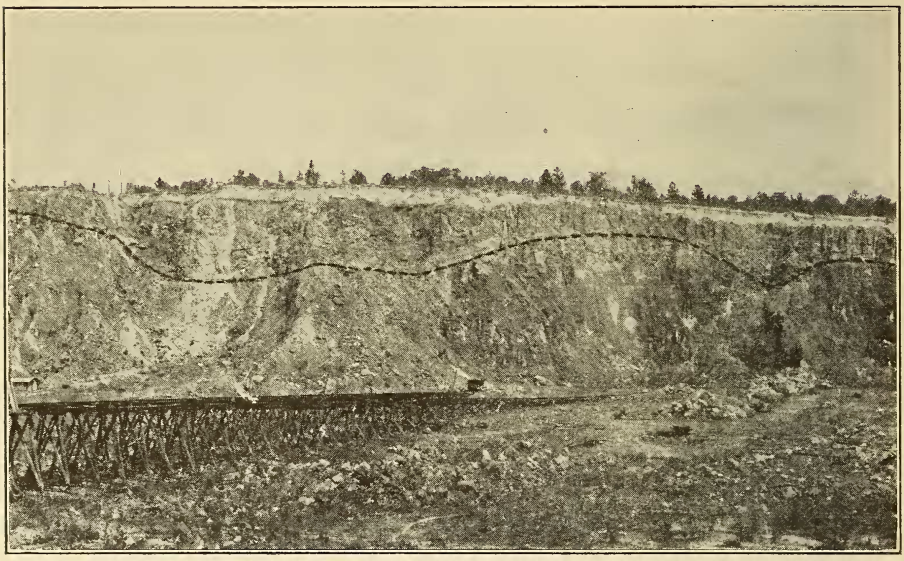

Fig. 1.—Face of Crystal River Rock Company's quarry, 5 miles southeast of Crystal River, Citrus County, Florida. Dotted line indicates unconformity separating Eocene and Oligocene beds.

Most of the fossils in the later collection (14336) came from a position above the undulating, horizontal band, and a few from rock believed to have fallen from the upper part of the quarry. The matrix in which the Oligocene fossils occur consists mainly of an indurated, semi-crystalline limestone. The following species were collected:

MOLLUSCA

Tubulostium sp. Two specimens were collected. This genus occurs in the Eocene. It also is living.

Pyrula sp., internal mold.

Cypraea sp., sculpture corroded.

Ampullina? sp.

Glycymeris? sp., internal mold.

Ostrea sp., apparently not an Eocene species.

Pecten brooksvillensis Mansfield?

Chione sp., similar to specimens in the Suwannee limestone (Oligocene) and in the lower bed at Ellaville, Florida (Oligocene).

Teredo? incrassata Gabb.

ECHINODERMATA

Rhyncolampus gouldii (Bouvé), quite common. This species is abundant in the Suwannee limestone (Oligocene).

FORAMINIFERA

The Foraminifera were examined by Dr. T. W. Vaughan who reports one determinable species. *Lepidocyclina supera* (Conrad), and concludes that the geologic horizon is Oligocene.